THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

: 3744

: Harry B. Tanner

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: Michael R. DeLuca

Title

: THERMOSTAT HAVING MULTIPLE

: MOUNTING CONFIGURATIONS

Customer No. 035811

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Dated: November 2, 2004

## RESPONSE

## Mail Stop Amendment

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This is submitted in response to the Official Action dated July 19, 2004.

The Applicant acknowledges the rejection of Claims 1-20 under 35 U.S.C. § 103 over the hypothetical combination of Kamada, Sumida and/or official notice. The applicants note with appreciation the Examiner's helpful comments with respect to the teachings of the references. In short, the Official Action indicates that Sumida discloses all of the elements of independent claims 1, 10 and 18 except for a display that can be oriented in a plurality of positions, allowing the thermostat to be mounted in a plurality of positions.

The Applicants respectfully submit that the combination cannot be the basis for a proper rejection because one skilled in the art would not look to Kamada in seeking a solution to the problem faced by the Applicant. This is at least because, (1) being from the field of hand-held communication devices, Kamada is not analogous prior art, and (2) there is no suggestion or motivation found in the references, or in the general knowledge of one skilled in the art, to combine Sumida with Kamada to arrive at the invention.

## Non-Analogous Art

In order for a reference to serve as a proper basis for rejection, the reference must be in the field of the Applicant's endeavor, or be reasonably pertinent to the particular problem with which the inventor was concerned. *In re* Oetiker, 24 USPQ 2d 1443, 1445 (Fed Cir 1992).

This application is directed to a temperature control apparatus for controlling the operation of at least one temperature modifying device, such as a heater, heat pump or air conditioner. Thus, the field of the Applicant's endeavor is heating and air conditioning. Kamada, on the other hand, describes a mobile communication device, such as a mobile telephone or personal handy phone system. (*See*, col. 1, lines 6-9) Having no connection to heating or air conditioning, Kamada's personal communication device is clearly not within the Applicant's field of endeavor.

When a reference is not in the field of the Applicant's endeavor, it may be considered reasonably pertinent if, "it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem." *In re* Clay 23 USPQ 2d 1058, 1060-61 (Fed Cir 1992). Common sense must be used to determine in which fields a person of ordinary skill would be expected to look for a solution to the problem faced by the applicant. 24 USPQ2d at 1446.

Typically, a temperature control apparatus, such as a thermostat, is mounted to a wall or other permanent structural feature. Once mounted, the thermostat becomes a fixture, which is not easily removed or repositioned. Because of the permanent nature of the installation, the orientation of the thermostat is typically not changed once it has been installed. Therefore, the Applicant was faced with the problem of providing a thermostat that can be permanently mounted in one of a plurality of

orientations while providing a display that can be read in any of those orientations.

The Kamada mobile communication device is not intended to be permanently mounted. Instead, the Kamada device is hand held, and can be moved from a horizontal to a vertical orientation with ease. One concerned with the permanent mounting of a fixture, such as a thermostat, would not be motivated to look to a reference that describes such a mobile device to solve the problem. There is simply no reason to expect to find the solution in a device that, by its very nature, can be easily reoriented to read the display. Because a hand-held device can be reoriented so easily, one would not expect to find the solution to the problem of permanently mounting a thermostat in any one of a plurality of orientations while being able to read the display in any of those orientations. Instead, one would be motivated to look to devices that are difficult to move. As such, the mobile communication device of Kamada would not have logically commended itself to the Applicant's attention in considering the problem, and Kamada is not reasonably pertinent to the particular problem with which the Applicant was concerned when the invention was made. Because Kamada is neither in the field of the Applicant's endeavor, nor reasonably pertinent to the particular problem with which the Applicant faced, Kamada cannot be considered analogous prior art, and the rejection should be withdrawn on this basis alone.

## No Suggestion or Motivation to Combine the References

The Applicant respectfully submits that even if Kamada were analogous prior art, the rejection should be withdrawn because there is no suggestion or motivation in the references themselves, or in the general knowledge of one skilled in the art, to combine the references to arrive at the invention. The Official Action does not point to any evidence of a suggestion or

motivation to combine the references. Instead, it is believed that the Official Action inadvertently relied on impermissible hindsight to piece together the elements of the invention using the Applicant's own disclosure as a roadmap. The use of hindsight is tempting because, in light of the Applicant's disclosure, it may seem that the rotatable screen of Kamada is a simple solution to the thermostat mounting problem faced by the Applicant. However, a proper obviousness analysis requires the difficult but critical step of casting the mind back to the time the invention was made. It is this requirement that guards against entry into the "tempting but forbidden zone of hindsight". *In re Dembiczak*, 50 USPQ2d 1614, 1616-17 (Fed Cir 1999).

In *Dembiczak*, the Examiner rejected claims directed to orange garbage bags that were printed with facial indicia (to make the bags look like decorative pumpkins) as obvious over references that individually showed (1) conventional garbage bags and (2) paper bags decorated to resemble pumpkins. Noting that there was no evidence of a suggestion or motivation to combine the references, the Court of Appeals for the Federal Circuit reversed the rejection. In doing so, the Court noted that the step of casting the mind back to the time of the invention and using only the prior art and the then-accepted wisdom in the field is "especially important in the case of less technologically complex inventions, where the very ease with which an invention can be understood may prompt one 'to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher." 50 USPQ2d at 1617.

The Court made clear that the "best defense against the subtle but powerful attraction of hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." *Id.* The evidence of a suggestion,

teaching or motivation to combine references can come from a number of sources; but the range of sources available "does not diminish the requirement for actual evidence." *Id*.

Considering this rejection, Sumida includes no teaching, description or suggestion to provide a display whose orientation can be changed relative to a thermostat housing. Kamada, at column 9, lines 25-28, indicates only that it is useful to rotate an image on a cellular phone display so that the image can be read when a phone is moved from a horizontal orientation to a vertical orientation. There is no suggestion that the rotatable display would be useful in a thermostat (or any other device) that is to be permanently mounted as a fixture.

This point is especially clear when one considers the manner in which the display of this invention is rotated. The thermostat can be set with a default orientation for the display using an electrical jumper in the controller (*see*, *e.g.*, claims 2, 11, 18 and 19) and then, if the selected mounting orientation of the thermostat calls for a different display orientation, the display can be rotated by switching the jumper to another position (*see*, *e.g.*, paragraph 0022). Kamada includes no description or suggestion to provide a permanently mountable thermostat with a default display orientation that can be changed to an alternative orientation by switching a jumper from one position to another.

The Applicant notes that Sumida describes a thermostat having a jumper wire. However, like Kamada, Sumida includes no description or suggestion to provide a thermostat with a display that can be rotated relative to the housing, and certainly includes no suggestion to use the jumper wire to do so. Because the prior art does not include any suggestion or motivation to provide a rotatable display in a permanently mountable thermostat, and because such a display

was not within the general knowledge of the skilled artisan at the time the invention was made,

the rejection should be withdrawn.

Conclusion

One skilled in the art of heating and air conditioning, searching for a way to provide a

thermostat that can be mounted in one of a plurality of orientations, would have no reason to look

to the field of hand-held communication devices for a solution. Being from the latter field,

Kamada is non-analogous art and cannot be properly combined with Sumida to form an

obviousness rejection. In addition, even if Kamada were applicable prior art, there is no evidence

of record of any suggestion or motivation to combine the references. Therefore, it is respectfully

requested that the rejection be withdrawn.

In light of the foregoing, the Applicant respectfully submits that the entire application is

now in condition for allowance, which is respectfully requested.

Respectfully submitted,

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